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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,605	02/23/2004	Brian Lora	END920085001US1	8338
26502	7590	08/09/2010	EXAMINER	
IBM CORPORATION IPLAW SHCB/40-3 1701 NORTH STREET ENDICOTT, NY 13760			SAEED, USMAAN	
			ART UNIT	PAPER NUMBER
			2166	
			NOTIFICATION DATE	DELIVERY MODE
			08/09/2010	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BRIAN LORA, FRANK BRICK, STEVEN HORAN,
RANDY WHITEHEAD, STEVE SIEGEL, and DAN LEWIS

Appeal 2009-005752
Application 10/784,605
Technology Center 2100

Before JEAN R. HOMERE, ST. JOHN COURTENAY III, and
STEPHEN C. SIU, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL¹

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

STATEMENT OF THE CASE

Appellant(s) seek our review under 35 U.S.C. § 134 of the Examiner's final decision rejecting claims 1-60. We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We Affirm-in-part.

BACKGROUND

Appellants' invention is directed to the management of data storage systems. (Spec. 1).

Claims 1 and 39 are illustrative:

1. A data storage management system for managing a plurality of remotely located, independent data storage systems, comprising:

a central monitoring system located at a geographical location different from a geographical location of each respective remotely located, independent data storage system, wherein the central monitoring system comprises a central data repository for data regarding the status of each of the remotely located, independent data storage systems; and

a plurality of remote agent systems, wherein each remote agent system communicates with a respective one of the remotely located data storage systems, *wherein each remote agent system collects metadata regarding the data stored at a respective remotely located data storage system*, converts the collected data to a standardized format, and stores the collected data in the central data repository.

39. A method of managing a remotely located, independent data storage system, comprising:
- collecting data regarding the status of one of the remotely located, independent data storage systems from the remotely located data storage system;
 - converting the collected data to a standardized format;
 - storing the standardized format collected data in a data repository of a central monitoring system, wherein the central monitoring system is located at a geographical location different from a geographical location of the remotely located data storage system; and
 - analyzing the collected data to identify data patterns that precede fault conditions at the remotely located data storage system.

The Examiner relies on the following prior art references as evidence of unpatentability:

Goldstein	US 2002/0198984 A1	Dec. 26, 2002
Giffords	US 2004/0102925 A1	May 27, 2004

Appellants appeal the following rejections:

1. Claims 50-60 under 35 U.S.C. § 101 as being directed to non-statutory subject matter.
2. Claims 1-60 under 35 U.S.C. § 103(a) as unpatentable over Goldstein and Giffords.

APPELLANTS' CONTENTIONS

Appellants contend that the cited references fail to teach or suggest metadata. (App. Br. 8) (Claims 1, 6, 10, 11, 13, and 27).

Appellants contend that the cited references fail to teach or suggest data storage systems. (App. Br. 8) (Claims 1, 6, 10, 11, 13, and 27).

Appellants contend that the cited references fail to teach or suggest consolidating collected data. (App. Br. 12 and 18; claims 40, 41, 48, 51, 52, and 59).

Appellants contend that the cited references fail to teach or suggest identifying patterns. (App. Br. 16-17, and 20; claims 42, 43, and 54).

Appellants contend that the cited references fail to teach or suggest communicating corrective action information to each respective remote agent system, and each remote agent system is configured to implement the corrective action in response thereto. (App. Br. 16; claims 45, 55).

Appellants contend that the cited references fail to teach or suggest a remote agent filtering collected data prior to communicating the collected data. (App. Br. 13 and 18; claims 46, 57).

Appellants contend that the cited references fail to teach or suggest action logic at each remote agent system that performs corrective actions. (App. Br. 13-14 and 18-19; claims 47 and 58).

Appellants contend that the cited references fail to teach or suggest an agent system that includes an activity director. (App. Br. 14 and 19; claims 49, and 60).

FACTUAL FINDINGS

1. Appellants do not contest the Examiner's rejection of claims 50-60 under 35 U.S.C. § 101. (App. Br. 7).
2. Appellants' Specification defines "metadata" as known to those skilled in the art as "a definition or description of data." (Spec. 17, ll. 6-8)
3. Giffords discloses arranging at least some of the data values of the first performance metric data according to the common representation format. (Abst., ll. 11-14)
4. Goldstein discloses that "agents 32 could be configured to 'filter' the transaction execution data." (Para. [0143]).
5. Goldstein discloses that agent computers may be programmed to capture sequences of screen displays and to transmit the screen displays to the reports server for viewing when a transaction fails. This feature allows the user to view the sequence of events that led to the error condition. (Para. [0017]).
6. Goldstein discloses analyzing collected performance data and as a result of the analysis performing a corrective action. Corrective actions are performed according to a set of predefined rules. For example, when a router is the source of network delay, a notification message is sent to the responsible ISP. (Para. [0261]).

ANALYSIS

At the outset, we note that Appellants have grouped certain claims together in the principal Brief. However, we observe that several of these claims differ in scope and we find the limitations argued by Appellants are

not always applicable to all of the claims in the particular groups designated by Appellants. In this context, any limitations not argued by Appellants are waived and will not be addressed in the analysis *infra*.²

§ 101 Rejection

Claims 50-60 are rejected under § 101 as being directed to non-statutory subject matter. We note that Appellants have not presented any arguments regarding this rejection. (FF 1). See App. Br. 7: “Appellants are not appealing the rejection under 35 U.S.C. § 101 at this time.”

Consistent with the holding of BPAI precedential opinion *Ex Parte Ghuman*, 88 USPQ2d 1478, 1480 (BPAI 2008), Appellants may not reserve arguments for some later time. *See* note 2 *infra* (Arguments not made are deemed to have been waived). Accordingly, we sustain the Examiner’s rejection of claims 50-60 under 35 U.S.C. § 101.

Claims 1-38

Appellants contend that the cited references fail to teach or suggest “metadata regarding the data stored,” as recited in independent claims 1, 15, and 27. (App. Br. 7-8).

² With respect to all claims before us on appeal, arguments which Appellants could have made but chose not to make have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Issue

Under §103, do the cited references teach or suggest the collection of “*metadata regarding the data stored at a respective remotely located data storage system*” as claimed? (Independent claims 1, 15, and 27).

Analysis

As a matter of claim construction, we adopt Appellants’ definition of the term “metadata” as being a definition or description of data (i.e., data about data). We conclude that Appellants’ definition comports with the plain, ordinary, and customary meaning of the term. (FF 2).

In light of the above construction, we do not find the Examiner has established that Goldstein in particular teaches or suggest metadata as claimed. *See* Ans. pp. 6, 29, 30. We agree with Appellants that Goldstein discloses transaction performance *data* such as server response times. (Goldstein Para. [0014]). However, we find data regarding a performance is actual data, and is not reasonably a *description or definition of data*, i.e., metadata or “data about data.” Therefore, we do not find the Examiner’s claim construction on pages 6-7 and 30 of the Answer to be reasonable, nor does the Examiner rely on or establish that Giffords remedies the deficiencies of Goldstein.

Therefore, we find the Examiner erred in rejecting independent claims 1, 15, and 27 under § 103. Accordingly, we reverse the Examiner’s § 103 rejection of claims 1, 15 and 27, and associated dependent claims 2-14, 16-26, and 28-38.

Independent claims 39 and 50

While independent claims 1, 15 and 27 similarly recite the term “metadata,” we observe that independent claims 39 and 50 do not recite “metadata.” Accordingly, Appellants’ arguments regarding “metadata” are inapplicable to independent claims 39 and 50. *See* App. Br. 17-18.

Appellants further contend that the cited references fail to teach or suggest “data storage systems.” (App. Br. 7). Appellants rely on the arguments made regarding claim 1. (App. Br. 17-18).

Issue

Under §103 do the cited references teach or suggest “data storage systems,” as claimed? (Independent claims 39 and 50).

Analysis

We disagree with Appellants. (App. Br. 7-8; Reply Br. 2-3). While Goldstein may be directed to transactional servers, Giffords is clearly directed to data storage systems. (*See* Giffords, Abst. ll. 1-4: “a first storage system configured to store digital data”; Para. [0018]” “data storage system 10”; Fig. 1, ref. 10). Moreover, we find the cited references are a combination of familiar elements that yield a predictable result;³ therefore,

³ “[W]hen a patent ‘simply arranges old elements with each performing the same function it had been known to perform’ and yields no more than one would expect from such an arrangement, the combination is obvious.” *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 417 (2007) (quoting *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 282 (1976)).

we find the Examiner's proffered combination teaches or suggests "data storage systems" as claimed. (Independent claims 39 and 50).

Accordingly, we sustain the Examiner's § 103 rejection of independent claims 39 and 50, as well as dependent claims 44 and 55 (not argued separately) which fall therewith. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Dependent claims 40, 48, 51, 52, and 59

For dependent claims 40, 48, 51, 52, and 59, Appellants rely on the arguments previously made regarding dependent claim 3. (*See* App. Br. 18 referring to page 12). We select claim 40 as representative of this group. *See* 37 C.F.R. § 41.37(c)(1)(vii). More specifically, Appellants state that the cited references merely disclose *arranging* data values and therefore fail to teach or suggest *consolidating* collected data, as claimed. (App. Br. 12).

Issue

Under §103(a) did the Examiner err in determining that the cited references teach or suggest "consolidating collected data" as claimed?

As a matter of claim construction, we conclude that the scope of collecting and "consolidating" data encompasses "arranging" data because a collected consolidation of data elements is a specific arrangement of data elements. As noted above, Giffords discloses arranging at least some of the data values of the first performance metric data according to the common representation format. (FF 3). Thus, given our claim construction, we find Giffords teaches or strongly suggests collecting and consolidating data within the meaning of representative claim 40.

Accordingly, we sustain the Examiner's § 103 rejection of representative claim 40, and claims 48, 51, 52, and 59 which fall therewith.

Dependent claim 41

Claim 41 depends from dependent claim 40 that we have sustained for the reasons discussed *supra*. Because Appellants present no separate arguments for dependent claim 41, we sustain the Examiner's § 103 rejection of claim 41 for the same reasons discussed *supra* regarding independent claim 39 and dependent claim 40. (*See* App. Br. 17, last paragraph).

Dependent claims 42, 43, 53, and 54

For claims 42, 43, 53, and 54, Appellants rely on the arguments previously made regarding dependent claim 12. (App. Br. 20). We select claim 42 as representative of this group. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Issue

Under §103 did the Examiner err in determining that the cited references teach or suggest “identifying patterns known to data storage problems?”

Analysis

We particularly note that for claims 42, 43, 53, and 54, Appellants rely on the arguments previously made regarding dependent claim 12. (App. Br. 20). In traversing the Examiner's rejection of claim 12, Appellants

contend that the cited references, notably Goldstein, do not disclose “identifying patterns known to precede data storage problems.” (App. Br. 16).

We observe that the arguments Appellants advanced with respect to claim 12 are not commensurate with the scope of claim 42 which instead recites “identify[ing] data patterns that precede fault conditions” (App. Br. 16-17). *Cf. In re Baxter Travenol Labs.*, 952 F.2d 388, 391 (Fed. Cir. 1991) (“It is not the function of this court to examine the claims in greater detail than argued by an appellant, looking for nonobvious distinctions over the prior art.”). Thus, we agree with and adopt the Examiner’s findings with respect to the actual claimed limitation of “identify[ing] data patterns that precede fault conditions.” (Ans. 17 and 32; claim 42).

Moreover, we find that Goldstein discloses that agent computers may be programmed to capture sequences of screen displays and to transmit the screen displays to the reports server for viewing when a transaction fails. This feature allows the user to view the sequence of events that led to the error condition (FF 5), which we find teaches or suggests the claimed data patterns that precede fault conditions. (Claim 42).

Accordingly, we sustain the Examiner’s § 103 rejection of representative claim 42, and claims 43, 53, and 54 which fall therewith.

Dependent claims 45 and 56

For claims 45 and 56, Appellants arguments rely on the arguments previously presented for claim 10. (App. Br. 16).

Issue

Under §103 did the Examiner err in determining that the cited references teach or suggest communicating corrective action information to each respective remote agent system, and wherein each remote agent system is configured to implement the corrective action in response thereto, as recited in commensurate form in dependent claims 45 and 56?

Analysis

Appellants contend that the cited references fail to teach or suggest the central monitoring system communicating corrective action information to each respective remote agent system, and wherein each remote agent system is configured to implement the corrective action in response thereto. (*See App. Br. 16*, regarding the rejection of claim 10).

However, unlike claim 10, we note that claims 45 and 56 do not require the central monitoring system to communicate corrective action information to each respective remote agent system. Therefore, Appellants are arguing limitations that are not claimed. We also agree with and adopt the Examiner's findings regarding the remote agents configured to implement the corrective action. (Ans. 40). Accordingly, we sustain the Examiner's § 103 rejection of claims 45 and 56.

Dependent claims 46 and 57

For dependent claims 46 and 57, Appellants arguments rely on the arguments previously made for dependent claim 4. (*App. Br. 18*). Appellants contend that the cited references fail to teach or suggest: (1) an agent system filtering collected data, and (2) filtering the collected data prior

to communicating the collected data. (*See* App. Br. 13 - regarding the rejection of claim 4). Appellants contend that Goldstein refers to a filtering option that users of the system can apply when viewing information on a reports server. (*Id.*).

Issue

Under § 103 did the Examiner err in determining that the cited references teach or suggest that each remote agent system filters collected data prior to communicating the collected data, as recited in commensurate form in claims 46 and 57?

Analysis

We find Goldstein expressly discloses that “agents 32 could be configured to ‘filter’ the transaction execution data,” which we further find has been “collected.” (FF 4). The filter is a part of the Performance Report which may be sent to facilitate remote monitoring of the transactional server. (Goldstein Para. [0123]). Therefore, we find that Goldstein teaches or suggests filtering collected data (i.e., filtering displayed information) prior to communicating the collected data (i.e., prior to sending the Performance Report), as claimed. (Claims 46 and 57).

Based on the record before us, we find that the Examiner did not err in rejecting representative claims 46 and 57. Accordingly, we sustain the § 103 rejection of claims 46 and 57.

Dependent claims 47 and 58

For dependent claims 47 and 58, Appellants' arguments rely on the arguments previously made for dependent claim 5. (App. Br. 18-19).

Appellants contend that the cited references fail to teach or suggest action logic at each agent system that performs the corrective actions recited in claim 5. (App. Br. 18-19; *see also* pp. 13-14 regarding the rejection of claim 5).

Issue

Under §103 did the Examiner err in determining that the cited references teach or suggest action logic that performs corrective actions in response to identifying a data pattern known to precede a fault condition?

Analysis

Appellants rely on the arguments previously made regarding claim 5. (App. Br. 18). Appellants state that “cited portion of Goldstein refers to an automated root cause analysis application that is coupled to the reports server that may be used to analyze performance data after the agents transmit the performance data to the reports server.” (App. Br. 13-14).

We find that Goldstein discloses a screen capture process using agent computers. (Goldstein para. [0147] – [0148]). In the event of a failed transaction, *screen captures* are sent to a human operator for viewing. (*Id.* at [0149]). Thus, we find the Examiner's proffered combination of Goldstein and Giffords teaches or at least suggests the limitations Appellants' dispute regarding claims 47 and 58. Accordingly, we sustain the Examiner's § 103 rejection of dependent claims 47 and 58.

Dependent claims 49 and 60

For dependent claims 49 and 60, Appellants rely on the arguments previously made regarding claim 7. (App. Br. 19). Appellants contend that the cited references fail to teach or suggest an agent system that includes an *activity director* as recited in claims 49 and 60. (App. Br. 14 and 19)

Issue

Under §103 did the Examiner err in determining that the cited references teach or suggest an agent system that includes an activity director?

Analysis

Appellants contend that Goldstein’s “root cause analysis system” (RCA) relied on by the Examiner as teaching the claimed “activity director” is coupled to the reports server and operates on data forwarded by the agents, and thus is not part of a remote agent system. (App. Br. 14).

We find unavailing Appellants’ singular attack on Goldstein. We find that Goldstein discloses an RCA application (“activity director”) that is also coupled to end-user agents 32. (Goldstein para. [0193]; Fig. 1). We find that while Goldstein shows the RCA application (“activity director”) and agent system to be separate entities, Goldstein strongly suggests that the entities are linked. Therefore, we find the Examiner’s proffered combination of Goldstein and Giffords strongly suggests the limitations disputed by Appellants regarding claims 49 and 60. Accordingly, we sustain the Examiner’s § 103 rejection of claims 49 and 60.

DECISION

We affirm the Examiner's § 101 rejection of claims 50-60.

We reverse the Examiner's §103 rejection of claims 1-38.

We affirm the Examiner's § 103 rejection of claims 39-60.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

ORDER

AFFIRMED-IN-PART

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